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## SYSTEM AND METHODS OF FLUORESCENCE, REFLECTANCE AND LIGHT SCATTERING SPECTROSCOPY FOR MEASURING TISSUE CHARACTERISTICS ABSTRACT OF THE DISCLOSURE

The present invention utilizes a plurality of spectroscopic systems and methods to measure characteristics of tissue useful in the diagnosis of disease. In a preferred embodiment, a combination of fluorescence, reflectance and light scattered spectra can be measured and processed to provide biochemical, architectural and morphological state of tissue. The methods and systems can be used particularly in the early detection of carcinoma within tissue in vivo and in vitro.